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Scale How, Ambleside, UK, 2009

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## CHILDREN'S TEETH.\*

BY NEWTON PETIT, L.D.S., R.C.S. LOND.,

Author of "*Evidences of Mercurial Poisoning*," &c.

In the opinion of some persons the subject indicated in the title may be neither so important nor so helpful as some other educational matters commonly treated, but no one can deny that it is the most neglected subject, alike in theory and in practice. Our *professional* journals, of course, speak of education of the public in these matters from time to time, but it is rarely, if at all, touched upon in those dealing with *educational* topics. I must ask your indulgence in an endeavour to avoid technicalities, at all times a difficult task for the professional man when speaking to the laity, a failing many of you will have observed in your doctor or lawyer.

In an endeavour to emphasise the importance of a constant attention and interest in your children's teeth, I trust that you may gather for yourselves some help, as many of you long ago have become dental patients; thus perhaps you may derive a double benefit from the trouble of reading about what must at all times be an uninviting subject. I cannot pass on without suggesting that it is every parent's duty to take an interest in these matters, for you must all, or at least 90 per cent. of you, make up your minds that these children's teeth are to be the cause of an annual sacrifice of time, which sacrifice should be during the holidays; as it is a little exacting to expect the schoolmaster or schoolmistress to give willingly the time out of school hours necessary. But this question should appeal to you as one of economy. Again, this concern for our children's teeth is largely one of education, and how this important matter has been neglected is only remembered when one is brought face to face with so many people who have given this their last attention, or, if this important part of one's anatomy has had attention, it is often the case that the front or on view teeth have received some attention, while the more valuable ones behind are totally neglected. How hurt some parents would be, if you told them that their children's boots were only polished at the toe like

the lazy soldier's, and yet many of them who would make trouble over their boots take little regard for the heels of their own or their children's mouths. I ask your indulgence for this last remark, which you would give unsparingly could you but see the wrecks of mouths that are so constantly brought to me in this prosperous Southport.

May I recall to your memory also what many of you must have noticed. The wretched teeth of the majority of our domestic servants and of the poor Lancashire working classes, who visit this town in search of health, when, possibly, the solution to a continuance of health for many of these poor people is some attention to their teeth. What can we expect for the infants, when their mothers are often denied that much needed rest after a hard day's work by the torments of neuralgia. These poor people, many of them, cannot afford to get that advice and treatment which is necessary, but let us after educating the monied classes to the necessity of dental advice, ask them to put their hands into their pockets and provide dental hospitals for the special treatment of such diseases. But to leave the ethics of dental reform, which perhaps should primarily be advanced by our own special association, and to return to what concerns our personal interests, I come to point one, the development of Teeth, and prefacing what I have to say, by asking you all first of all to fully appreciate and grasp the fact that a tooth is a living member of the body and has its own special work to do in conjunction with other teeth; that it has a vascular or blood system, and also a nervous system, which latter I seldom hear disputed. Now having thus established the fact of the teeth being part of our living body, it follows that a tooth is just as much at stake as any other organ or limb in retaining its health and vigour, and for this reason it is necessary for me to point out the importance for mothers to exercise the utmost care in their mode of living during pregnancy; for it is in these months that the teeth are largely developed, and I do not only mean the baby or deciduous teeth, but a great portion of the ultimate adult and permanent teeth are hidden facts at birth, hence the initial duty of a mother. The question of teething is rather one for the doctor than the dentist, but let me suggest to mothers, the harm that is likely to accrue from the administration of quack teething powders, which are so often

\* A Lecture given to the Southport Branch of the P.N.E.U.



charged with mercury. If the child is much distressed during teething, it is for the doctor to decide if mercury or opium is necessary and not the mother. The child at the age of twenty-six months or thereabouts, is in possession of its full set of baby teeth.

There is a point here concerning the *feeding* of infants that offers itself, viz., seeing that it is not until the age of twenty-six months or soon after the age of two that the child has its full complement of teeth, does it not show one the necessity of avoiding meat foods and so on until after this age, and of adhering to the fluid milk and soft farinaceous foods, which require small assistance from the back teeth, or those last to make their appearance. We are seldom wrong in following the silent hints from nature, and surely here is one for the mother who is anxious to force and make strong her babe by the injurious administration of meat foods before this age. It often happens that even at this time the mother is so disappointed to find that decay has commenced to work havoc in this little mouth and the all-important first visit to the dentist is before her; of course it is of the greatest importance that these teeth should be saved for the child, for when is general development more active than during these early years of life, and if the cutting up of food or first stage of digestion is denied, something must suffer as a consequence. We have no business to imagine that because the stomach is out of sight, it is silently doing duty for those impaired members above.

Well, we will imagine this anxious parent arrived at the dentist's, and I will endeavour to answer a few of the questions which are put to us with almost every-day regularity; anticipating such by remarking that it requires a peculiar knack to handle children in a dental chair. They are wiser and more discerning than we often imagine. Harsh treatment will never make them our friends. While some will not submit even under the most gentle treatment, the majority are however amenable to it. The first sitting should be a short one, and often only to get them acquainted with you, if merely to let them see you are not the bear you were made to appear in their young imagination, through experiences related by other and older members of the family. For they may have heard someone remark, "You are going to the

dentist. I am sorry for you—it's the worst place in the world—I hope that I shall never have to go again." With such remarks the child is familiar. Is it any wonder that these little people look upon the dentist as something with fiery eyes and fire breathing from his nostrils? Just go back 20, 30 or 40 years and put yourself in the child's place. Think of the description they have heard of that "grinding thing." Can you imagine why a child should not be frightened out of its wits? Here, parents, is something to ponder over and one little matter to help us with. It must surely be unnecessary to appeal to you to discourage such remarks in your homes, and also out of them, where there is a large field for education in these matters. With such help we can receive a child into our surgeries, when the dentist's endeavour should be to show him that he is only an ordinary man and without those awful appearances I mentioned before; examine his teeth in an ordinary chair, ask him to come and look at your big chair and take a ride in it, lift the chair and let it down and possibly if the child is very highly strung, dismiss the little fellow with an appointment. From one step to another the most timid child can be carried successfully through tooth filling. Let him carry the appointment card for the next sitting and make him feel that he is of importance. The days of sleight-of-hand dentistry are over, the instrument should be no longer sneaking up the sleeve. If it be necessary to hurt the child, tell him so; but never break a confidence, which, having established, is a help in making regular visits to the dentist largely a question of habit.

A few questions which we are often asked and which I will answer in the order given, are:—

What is the cause of my child's teeth decaying and are they different to other children?

Are sweets harmful?

What are the best means of preventing the disease?

What do you recommend for cleaning?

(1) What are the causes of decay and are my children's teeth worse than other people's?

As a result of the labours of a number of dentists who examined the teeth of 10,000 children averaging twelve years of age, 85 per cent. required dental attention. Now for the causes of all these defects in this generation. The



chief one is that of overcrowding of the teeth. I write with almost twenty years' experience of practice; the first part spent in Birmingham and the London Hospital, practice obviously with the poor and latterly amongst the better classes of our town and district, and *I have no hesitation in saying that the only sure way of preventing the ravages of this disease, decay, is to be met by an endeavour to isolate each tooth.* I am now, of course, speaking of the permanent teeth, which should have made their full appearance at the age of 12-13, and it is at about this age of twelve, when by the timely removal of the four six-year old or first permanent molar (in most cases this tooth) that we can ensure this isolation, and also more often than not gain sufficient room to allow irregular teeth in the front to fall into position without the use of regulation plates, so expensive and so harmful to the teeth generally. The reason this first permanent molar should be selected is, first of all, because it is the most *delicate* tooth in the mouth, and secondly that it holds the most favourable position in the jaws for the teeth forward to fall back into, and for those coming molars behind to move forward into, thus gaining that much needed division between each tooth, so necessary for cleanliness. These six-year old molars should be filled if they decay early as they usually do when they first come, and under no consideration should they be extracted until the twelve-year old molar is about to show itself, otherwise the advantage will be lost. If this operation is carried out at the proper time and after careful diagnosis, the majority of children will have secured to them a good set of teeth for the greater part of life and their parents will be saved endless guineas in otherwise and often fruitless endeavours to restore these crumbling and crushed members. A case in point. The model I have in my hand shows the result clearly. This patient was brought to me at the age of twelve, when I extracted the six-year old teeth on the right side only, asking the patient to return in a fortnight's time for the other two on the left side to be removed. For some reason or another the child was not brought back until a few weeks since—an interval of five years, the girl being now seventeen. On the right side of the mouth the teeth are all perfect, whereas on the left or crowded side there is scarcely a sound tooth above or below. *Understand clearly* I do not

wish to infer that herein lies the perfect or infallible cure; for we see mouths with teeth so poor in structure that it is humanly impossible to save the teeth at all, but such conditions are happily rare.

Perhaps a word here as to "why it is necessary to isolate," when we see the teeth in skulls of the natural or uncivilised people of the earth so perfect and yet so jammed and crushed up one to the other. I include the negroes, whose children suck the sugar cane from their earliest infancy, when I am tempted to digress into the question regarding sweets. There is a common belief that these are injurious to the teeth and that sugar candy is positively destructive to them. We consider this an error. Cane sugar is not only unfermentable before it is changed by the action of the digestive ferment, but it absolutely prevents fermentation. The house-wife preserves her fruits and her delicacies by its means and sugar-cured meats are well known to every one. If sweets are pure and are made from cane sugar, they will be harmless to the teeth and may be recommended in moderation. It is adulterated sweets that do harm to the teeth. The use of too much sugar and eating of sweetmeats between meals is bad for digestive organs, and through them may act deleteriously upon the teeth, but the teeth were *never* directly injured by pure sugar or candy. Thus the teeth of the negroes I before mentioned are excellent in quality.

But to return, "And why is it necessary to isolate teeth when we have evidence in these wild people of such perfect and crowded dentitions?" Well, we are nowadays too civilised for the welfare of our bodies. If we were to tie one of our arms behind us we should soon find that it was growing gradually less, or atrophying for want of work. Now I contend that this is what is happening to our jaws. We haven't all of us been tying them up, but we have been using knives and forks, and eating minced foods and soft food, when to have kept them well developed we should have been eating refractory foods and biting our meat from bones. I don't for a moment suggest that you should fall back into these barbaric modes of living, but I do offer this as an explanation for the overcrowded condition of the jaw of the present and latter generations. I think it is well for me here to allude to the crowded prominent and pointed jaw, a condition very ugly,



but which is more often caused by thumb sucking or rubber teat sucking in children; this is a bad habit and is often continued for years. The child who is difficult to break of thumb sucking should be made to wear boxing gloves, and the habit will be difficult to follow. A mother should look for surgical advice when she notices a child always sleeping with the mouth open.

Other and predisposing causes of decay are many, including defective structure, handed down from parents; careless living of the mother and so on. Actual and immediate causes in children are uncleanliness, keeping of late hours in crowded and heated rooms, when the child should be at rest and asleep in a clean atmosphere. If one were to apply litmus paper (a test for acid) to the mouth of most people in ballrooms and so on, in most cases we should get an acid reaction and we know well enough that that must mean mischief to the teeth, also in particular a form of dyspepsia where you get regurgitation from the stomach with powerful acid vomit.

We now come to the two last and often repeated questions. What can we do to stop this disease and what do you recommend for cleaning? The *immediate* cause of decay, caries, or death of the tooth structure, being the lodgment of acid or acid-forming debris, the prophylaxis of caries must therefore be based on the prevention of these causes and on the strengthening of the structures involved. By careful, regular and systematic examination of the mouth, defects in the structure of the tooth can immediately be detected and at once remedied. The secretions in the mouth can be maintained in a healthy condition by careful attention to the general health, to the choice of suitable and properly cooked foods, and by moderation in the use of sweet and acid substances. Then the greatest point of all; the decision to have room made in the mouths of your children, that each tooth may be perfectly cleansed.

Absolute cleanliness of the mouth should be insured by the use of a yielding quill tooth-pick and of a moderately soft tooth-brush. The latter should be used night and morning together with soap and some simple powder, precipitated chalk being the cheapest and best of all. The tooth-brush to be dipped into the powder before the soap is washed from the brush (the soap alone should be used first). Care should be

taken to rub the teeth up and down as far as possible in respect of the back as well as of the front surfaces. In junior schools a tooth-brush drill should be instituted to indicate to the pupils how, when and where to brush.

To formulate the conclusions at which we have arrived the best of health is only possible when the dentition is complete and perfect.

Decay frequently sets in with respect to the milk teeth, which though frequently considered by parents to be of no importance really demand instant attention. Avoid if in any way possible the extraction of these little teeth. They form the scaffolding for their successors to grow upon.

Appearance counts for much in the battle of life. None of us can afford to dispense with all the aids we can naturally acquire. In the choice of fit agents for their work employers of labour in every department are naturally first struck by the face, and every face is imperfect when the mouth is imperfect.

Again, what a large measure of success in life depends on a good enunciation. In the present day public life is more general for all; it is a prime necessity for some. The clergyman, doctor, lawyer, member of Parliament or any other public body, is severely handicapped by a lisp, or a thick and indistinct utterance and these defects are mainly due to defects in the dentition.

Lastly, once gone, our "pearls of price" are gone for ever. Substitutes there are, but these, however perfect, can never be more than substitutes.

I trust that what I have said may direct some attention to the pressing importance of this subject in connection with families and schools, to the necessity of carrying out a systematic course of watchfulness and treatment, and to the advantages which will follow, not only in respect of freedom from pain and the absence of interference with school life, but also with regard to the health and usefulness of the individual even to the end of his existence. Toothache is a terrible demon, especially in respect to children already neurotic or neurasthenic, but happily it is one that may be exorcised and in most cases happily expelled.